



## MANAGERIAL ECONOMICS

### MBA 5109: JAN-APRIL & MAY-AUGUST

INSTRUCTIONS: Attempt Question **one** and any other **two**

#### QUESTION ONE (30 marks)

Examine the following concepts as used in managerial economics:

- a) Efficient market hypotheses (5 marks)
- b) Decision making using marginal analysis (5 marks)
- c) Elasticity (5 marks)
- d) Financial intermediation (5 marks)
- e) Initial public offer (5 marks)

#### QUESTION TWO (15 marks)

A firm is selling coffee brand X and its estimated that the relevant demand regression model is

$$Q_x = 1.5 - 3.0 P_x + 0.8 I + 2.0 P_y - 0.6 P_s + 1.2 A$$

$Q_x$  is sales of coffee brand X,  $I$  is disposable income,  $P_y$  is price of competitive coffee brand,  $P_s$  is price of sugar and  $A$  is advertising expenditures for coffee brand X.

Suppose:  $P_x = \$2$ ,  $I = \$2.5$ ,  $P_y = \$1.80$ ,  $P_s = \$0.50$  and  $A = \$1$ .

Required:

- a) Explain the concept of elasticity in business economics. (5 marks)
- b) Calculate the optimal sales of coffee brand X for this firm at the relevant demand function. (4 marks)
- c) Calculate own price elasticity of demand (3 marks)

- d) Compute cross-price elasticity of demand (3 marks)

**QUESTION THREE (15 marks)**

A mushroom farmer faces the following costs:

Table 1: Estimated costs (thousands of Kenya shillings) for a mushroom farmer

QUANTITY	0	10	20	30	40
TVC	0	20	45	65	80
TFC	50	50	50	50	50

TVC: TOTAL VARIABLE COST

TFC: TOTAL FIXED COST

Required:

- a) Explain the nature of costs that are relevant to a mushroom producer. (6 marks)
- b) Compute the average variable costs (3 marks)
- c) To compute the marginal costs (3 marks)
- d) Can the farmer make optimal production decision based on this information?  
Support your answer. (3 marks)

**QUESTION FOUR (15 marks)**

Optimization techniques are becoming crucial managerial instruments in efficient decision making. One common optimization technique is the Lagrangian multiplier method.

- a) State the pre-requisite conditions that necessitate the use of the Lagrangian technique. (3 marks)
- b) Explain the critical steps in the Lagrangian procedure (6 marks)
- c) Discuss the first and second order conditions for profit maximization (6 marks)

**QUESTION FIVE (15 marks)**

- a) As a young entrepreneur you come up with a good business idea. Explain how you will obtain the initial start-up capital for your venture (5 marks)
- b) Explain the initial challenges you will face in starting the business in Kenya. (5marks)
- c) Assume after ten years your venture has grown tremendously, what will be the new managerial challenges if you consider expanding the business nationally? (5 marks)